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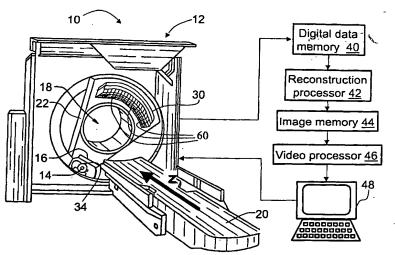
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(54) Title: RADIATION DETECTOR WITH SHIELDED ELECTRONICS FOR COMPUTED TOMOGRAPHY



(57) Abstract: A radiation detector module includes a scintillator (62, 62', 162, 262) arranged to receive penetrating radiation of a computed tomography apparatus (10). The scintillator produces optical radiation responsive to the penetrating radiation. A detector array (66, 66', 166, 266) is arranged to convert the optical radiation into electric signals. Electronics (72, 72', 172, 272) are arranged on a side of the detector array opposite from the scintillator in a path of the penetrating radiation. A radiation shield (86, 86', 100, 100', 186, 210, 210', 286, 286') is disposed between the detector array and the electronics to absorb the penetrating radiation that passes through the scintillator. The radiation shield includes openings (90, 90') that communicate between the detector array and the electronics. Electrical feedthroughs (88, 88', 102, 102', 102'', 188, 212, 212', 288, 288') pass through the radiation shield openings and electrically connect the detector array and the electronics.

